

REMARKS

Applicants thank the Examiner for the thorough examination of the application. Claims 1-19 are pending. Claims 6-18 are withdrawn from consideration. Claim 19 is added. Claim 1 is amended. Claim 1 is independent. Reconsideration of the present application, as amended, is respectfully requested.

Drawings

Applicants have not received a Notice of Draftsperson's Patent Drawing Review, Form PTO-948, indicating whether the formal drawings have been approved by the Official Draftsperson. It is respectfully submitted that the drawings comply with USPTO requirements. Clarification with the next official communication is respectfully requested.

Claim for Priority

The Examiner has recognized Applicants' claim for foreign priority and receipt of the certified copy of the priority document. No further action is required at this time.

Information Disclosure Statement

The Examiner has acknowledged receipt of the Information Disclosure Statement filed May 14, 2001, and has returned an

initialed copy of the Form PTO-1449 filed therewith. No further action is required at this time.

Rejection under 35 U.S.C. §103(a)

Claims 1-5 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,121,947 to Furuhashi et al. in view of U.S. Patent No. 5,739,887 to Ueda et al. or U.S. Patent No. 4,758,896 to Ito or Applicants' disclosed related art. This rejection is respectfully traversed.

While not conceding the appropriateness of the rejection, but merely to advance prosecution of the instant application, claim 1 is amended to recite a liquid crystal monitor drive apparatus for driving a liquid crystal panel having a combination of elements, including a connector for inputting an analog graphic signal and a clock signal and a peripheral circuit coupled to an inverter for driving a back light unit.

It is respectfully submitted that the combination of elements set forth in independent claim 1 is not disclosed or rendered obvious by the art of record, including Furuhashi et al., Ueda et al., Ito, or Applicants' disclosed related art.

In contrast to Applicants' claimed invention, Furuhashi et al. merely shows an LCD control device including a personal computer 101, which outputs an analog video signal 102 to A/D converter 104,

a gate circuit 109, a frame memory 110, an enlargement processing control circuit 118, and a display timing generating circuit 120, as shown in FIG. 1. The enlargement processing control unit 118 performs enlargement processing by using frame memory read data 115 and line memory read data 116 and outputs the enlargement processed results to the display timing generating circuit 120. Furuhashi et al. does not teach or suggest a peripheral circuit coupled to an inverter for driving a back light unit, as recited in claim 1.

The Office Action relies on each of Ueda et al., Ito, and Applicants' disclosed related art for a teaching of combining electronic components into an integrated circuit. However, these references do not teach or suggest the above-cited limitation of claim 1 and, therefore, fail to cure the deficiencies of Furuhashi et al.

Added Claim

Added claim 19 is directed to the embodiment wherein the peripheral circuit operates with a frequency signal much lower than that of the clock signal. The subject matter of added claim 19 is fully supported by the specification as filed. No new matter is introduced.

Conclusion

In view of the foregoing, it is respectfully submitted that the art of record, including Furuhashi et al., Ueda et al., Ito, or Applicants' disclosed related art, fails to teach or suggest the combinations of elements set forth in independent claim 1. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. §103(a) are respectfully requested. It is believed that independent claim 1 is allowable. Since the remaining claims depend from these allowable independent claims, they are also allowable for at least the above reasons, as well as for the additional limitations provided thereby. Thus, all claims are allowable.

However, if there are any outstanding issues, the Examiner is invited to telephone Sam Bhattacharya (Reg. No. 48,107) at (703) 205-8000 in an effort to expedite prosecution.

Pursuant to 37 C.F.R. §§1.17 and 1.136(a), Applicants hereby request a one-month extension of time in which to file this reply. A check for the required fee of \$110 is attached.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or to credit any overpayment to Deposit Account No. 02-2448 for any additional fees

Serial No. 09/522,449
Docket No. 2658-225P
Group Art Unit 2675
Page 8

required under 37 C.F.R. §§ 1.16 or 1.17, particularly extension of
time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 

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2658-225P
Attachment
JAK:SB:rk

SB

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MARKED-UP COPY OF AMENDMENTS

In the Title:

Please **amend the title** as follows:

LIQUID CRYSTAL MONITOR DRIVE APPARATUS CAPABLE OF REDUCING
ELECTROMAGNETIC INTERFERENCE.

In the Claims:

Please **amend claims 1 and 4** as follows:

1. (Amended) A liquid crystal monitor drive apparatus for driving a liquid crystal panel, comprising:

a connector for inputting an analog graphic signal and a clock
signal;

a peripheral circuit coupled to an inverter for driving a back
light unit;

an analog-digital converter arranged to convert the analog graphic signal from the connector into digital graphic data;

a scaler for scaling the definition of the digital graphic data;

a timing controller arranged to drive the liquid crystal panel based on the digital graphic data from the scaler; and

Serial No. 09/522,449

Docket No. 2658-225P

Group Art Unit 2675

Page 10

an integrated circuit chip, said integrated circuit chip includes at least two of said analog-digital converter, said scaler, and said timing controller.

CLAIM 19 IS ADDED.